

FEDERAL AVIATION ADMINISTRATION

WESTERN SERVICE AREA

ENGINEERING SERVICES

AWP

STATEMENT OF WORK

FOR

Design/Built

New Wastewater Treatment System

With Lift Station and Raised Leach Field.

HONOLULU CONTROL FACILITY

HONOLULU, HAWAII 96818

01. PROJECT INFORMATION

<u>PROJECT LOCATION:</u> Honolulu HCF Honolulu International Airport Honolulu, HI 96818	<u>FACILITY MANAGER:</u> Sophia S. Y. Tang HCF/OEO District 760 Worchester Ave Honolulu, HI 96818 (808) 840-6400
<u>PROJECT ENGINEER:</u> Ira Farnoush FAA AWP Regional Office 15000 Aviation Blvd. Hawthorne, CA 90250 (310) 725-7294 Office (310) 880-0462 Cell	<u>SITE CONTACT:</u> Stuart Sakai FAA ZHN CDE SSC 760 Worchester Ave Honolulu, HI 96818 (808) 840-6702

02 INTRODUCTION

There are two (2) septic tank systems that service the Honolulu Control Facility (HCF). One system serves the Center Building Maintenance (CTRB), and the other serves the Tower Building (TOWB).

The system which serves the CTRB no longer serves its prime objective. There are several factors that have contributed to the failure of the existing system. The main reason is the depth of the septic tanks and leaching trenches which have been installed too close to water table, preventing percolation of the waste water into the ground. Furthermore, the structural integrity of the septic tanks has been comprised allowing underground water leaking into the tanks.

The purpose of this contract is to Design/Built new Wastewater Treatment System with Lift Station and Raised Leach Field to replace the existing failed system. Under this contract, the contractor shall provide all engineering services required to design a new septic tank & leach field system, and provide all labor, material, and other services needed to construct the new designed septic tank system at the Northeast corner and adjacent to the existing systems at the HCF.

NOTES:

1. The contractor must provide special provision during the transition from the existing to new system in order not to interrupt the operations at the HCF. The method must be reviewed and approved by the FAA.
2. The job site is located at the HCF within the Hickam Air Force Base (HAFB) approximately 8 miles from the main gate. Therefore, to reach the job site, the contractor must pass through the security gates of the HAFB.

03 SCOPE OF WORK

The work under this contract includes but not limited to:

- Provide engineering services to design a waste water treatment system. The new system should be designed and install using a lift station that allows the leach field to be located adequately above the ground water level. The design package must be stamped by a professional engineer.
- Provide all labor, materials, and other services needed to construct the new system, including septic tanks, lift station with three (3) pumps (for redundancy), and gravel less chamber High Density Poly Ethylene (HDPE) leach field, or similar. *Note; the pumps must be located at the ground level in order to make any maintenance task easier and safe to complete.*
- *Connect (Field Determined) the existing drain line from National Weather Service Building to new system (Refer to Supplemental Sketch "Building Sanitary Sewer Utility Plan).*
- Provide and install all pipes fitting, filters and other materials needed for proper operation of the new system.
- Provide and install a grease trap to replace the existing one.
- Provide all necessary labor, material needed for transition of CTRB sewer lines into the new system.
- *Install a stand by sewer line from the existing TOWB sewer line (to be field determined) to new septic system (This line will be used in the future in the case of TOWB's septic system failure. No connection to the existing line will be required at this time. (Refer to Supplemental Sketch "Building Sanitary Sewer Utility Plan").*
- Test the new system for functionality.
- *Fill the existing tanks associated with the main system with dirt and abandoned them in place (main system only)*
- *Provide and install all electrical device and wirings needed for the project, and provide and install remote monitoring capability for the pumps at SOC & ZHN CDE/ESU - refer to attached Existing Electrical Infrastructure Sketch. Note: the contractor shall provide all power and control wirings/cables needed for the project, and install them up to Junction Box #2 (Refer to Supplemental "HCF Leach Field Existing Electrical Infrastructure Sketch"). The FAA will install from this point and terminate at the appropriate panels. Nevertheless, the functionality of the system will remain the responsibility of the contractor)*
- Provide as build drawings
- Remove all debris & clean up the site

In order to familiarize the interested contractors to the job site and for assessment of the location, a mandatory job walk will be scheduled. The date and the time of the job walk will be determined and announced by the Contracting Officer.

04 DESIGN/BUILD CRITERIA:

The following criteria must be considered in design of the septic system:

1. Total number of employee at the facility 229, - with approximately 120 people on the day shift.
2. A cafeteria serving approximately 150 breakfasts and lunches on week days.
3. Water consumption approximately 4000 Gallons per day.

Notes:

1. Add 15% to the above numbers for future growth in people and/or changes in the environment.
2. Waste water is generated from showers, water closets, urinal, lavatories, drinking fountains, janitor's sinks, sinks, floor drains floor sinks, kitchen sinks and condensation discharge from air conditioning systems.

05 TECHNICAL DATA

The results of a soil sample performed in March 1997, indicates:

- Soil Class GM – soil properties, Brown silty sandy fine coralline and basaltic gravel (*Refer to Boring Diagram*)

The following are results of an exploratory investigation for the proposed area:

- Ground water level approximately 5'-6"
- Percolation test 1/2" per 10 minutes.

06 CONSTRUCTION CODES:

All structural and civil works shall be in full compliances with the requirements of the 2006 International Building Code (IBC-2006). All other works shall meet the requirements of the State of Hawaii, Department of Health (DOH), and National Pollutant Discharge Elimination System (NPDES), and all other authorizing agencies. All electrical works shall comply with the requirements of the NEC, NFPA codes and the FAA standard FAA C-1217

07 SECURITY REQUIREMENTS:

The job site is within the secure area of the Hickam Air force Base (HAFB) and The General Contractor and sub Contractor shall comply with all instructions, rules, security, and safety requirements of the HAFB, HCF & FAA. Work performed at this site shall be done under FAA escort at all times.

08 PROTECTION OF EXISTING UTILITIES:

Any damage to existing utilities, vegetation, structures, fencing, gates, etc. caused by the Contractor in the performance of the work shall be immediately repaired by the contractor with quality material and best methods at no cost to the Government. Contractor shall dedicate all effort (manpower and equipment working 24 hours a day, including weekends and holidays) to restoring the damage utility back to normal and as approved by the Project Engineer.

09 CONTRACTOR RESPONSIBILITIES

The General Contractors and sub Contractors performing tasks under this contract shall adhere to all Occupational Safety and Health Administration (OSHA) requirements, and adhere to all applicable state and local government codes, and regulations. General Contractor shall ensure that all works under this contract are subject to the Davis-Bacon Act. General Contractor shall, without additional cost to the government, obtain all applicable licenses and permits necessary to complete tasks under the contract.

10 TECHNICAL REQUIREMENTS AND SERVICES:

The following documentation must be provided as part of this project:

10A DESIGN ENGINEERING:

The General Contractor shall provide resource for the development of a conceptual design for a water treatment/septic tank system based on the criteria put forth in this Scope of Work (SOW) and all applicable codes and regulations. The FAA will review the conceptual design to assure that all the required requirements have been met. In the case of any deviation from the SOW, the contractor shall incorporate the FAA's comment(s) into the design package without any additional cost to the FAA, and prepare the final design package. The design shall be approved and stamped by a licensed professional engineer.

108B DRAFTING:

The General Contractor shall provide drafting and related services as required for construction of this project. Drafting services shall be provided through Computer Aided Drafting and Design (CADD). All drafting services shall be performed in Bentley Micro Station format using best commercial practices.

The General Contractor shall provide soft copy of the as built drawings to the FAA without any charges upon completion of the project.

11. SUBMITTAL WITH BID PACKAGE

The bid package shall include the following:

- Conceptual design engineering including technical and procedural details.
- Total cost and cost breakdowns for each task.
- Product literatures for all material, devices, and equipment intended for the project.

12. PROGRAM MANAGEMENT

General Contractor shall provide program management services to ensure and monitor compliance, quality, timeliness, and cost efficiency during the duration of this contract. General Contractor must provide a full time superintendent and establish and maintain a program management organization to be responsible for the following:

- Planning, organizing, scheduling, conducting, and managing all activities required for this project
- Ensuring all General Contractor and sub Contractor personnel assigned to perform work under the contract meet appropriate technical qualifications
- Maintain regular communications with appropriate FAA personnel and ensure that all General Contractor and sub Contractor activities are fully coordinated with Contracting Officer Technical Representative (COTR).

Advance coordination and clearance is required to access FAA facilities.

13 STORAGE:

The contractor shall safely store all material/products per manufacturer's recommendations. Products liable to be degraded as a result of weather conditions shall be maintained in suitable storage areas while moisture-sensitive products shall be maintained in dry storage areas. The contractor shall not create a potential fire hazard, nor violate other safety regulations while storing products. Contact the COTR for possible storage sites.

14 HANDLING:

The contractor shall handle all products and materials in a safe, workmanlike manner, per the manufacturer's recommendations. Only experienced, knowledgeable contractor personnel will be allowed to apply, attach, or otherwise use any required products. Any material, which is damaged or in damaged containers shall be properly discarded, and not used on the project.

15 INSPECTIONS:

The Contractor shall allow the COTR, or other persons designated by the FAA to access to all portions of the work. Also, upon request by the contractor, the COTR shall provide a punch list indicating his summation of incomplete contractual requirements. If, in the opinion of the COTR, a punch list cannot be considered final because of the number or magnitude of incomplete items, a preliminary punch list may be prepared.

16 PRE-CONSTRUCTION CONFERENCE:

A pre-construction conference and or teleconference call will be held prior to start of work. The Contracting Officer will set the date and time of this conference after award of the contract. It will mandatory that the contractor or his designated representative to attends or call in into teleconference call. The local FAA representative(s) shall also attend.

17 COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

After the award of the contract, the Notice to Proceed (NTP) will be issued. The contractor will be given a maximum of Thirty (30) calendar days for the on-site works to complete the project, and make it ready for operation.

NTP with on-site work will not be granted until the General Contractor acknowledges that, all required materials and equipment, as approved by the FAA are in his/her possession and ready for installation. The Contracting Officer will coordinate the NTP with the General Contractor to ensure his/her ability to commence work upon that date.

18 WARRANTIES:

The Contractor shall warrant all materials and equipment under this contract for one year starting from the project completion date. The warranty shall be unconditional and the Contractor shall furnish all labor and materials required to repair or replace defective or failed portions of the contract work. Any warranty repairs shall be completed by the Contractor within a maximum of 48 hours after notification by the Government for any failure.

The Contractor shall provide the Manufacturer warranty and is required to specify workmanship warranty.

19 AVAILABILITY OF UTILITIES: Water and electricity are available for the Contractor's use. The telephone service and sanitary facilities are not available and must be provided by the contractor.

END OF DOCUMENT